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Reports
Aerial Survey

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Central
Insect
Salmon

SALMON NATIONAL FOREST

Annual Aerial Survey

August 15-22, 1956

by

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Entomologists

An aerial survey of the Salmon National Forest was conducted between August 15 and 22, 1956. The purpose of the examination was to detect, locate, and describe the evidence of unusual forest insect activity. Such an aerial survey also aids in planning ground coverage by revealing the danger spots.

The spruce budworm is the most prominent pest at this time. Three degrees of intensity of damage were used on the aerial work with budworm: light, medium, and heavy defoliation. A ground appraisal survey covering the spruce budworm situation has been reported separately[2].

Bark beetle damage was also observed and recorded during the aerial survey. In the case of most bark beetles, the aerial detection reveals only the damage of the previous years' attacks and not the new infestations. In some cases there might be fading of foliage during the season of attacks. Generally, ground work is required to determine the current status of bark beetle infestations.

It is planned to make yearly aerial examinations of the forest to observe the general conditions and possible dangerous situations in the earlier stages of development. Observations by Salmon Forest personnel during the year will also aid in improving our system of detection.

The attached map shows the flight lines followed during the aerial survey and the centers of infestation as mapped. A description of each area is keyed out on the map with brief statements on the insect species involved.

1/Forestry Aid - Research

2/Cole, W. E. 1956. Spruce Budworm in Southern Idaho with Special Reference to Surveys. Mimeo. IF&RES. F.S. Ogden, Utah.

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Area A.
Area A is drawn rather large in size but contains many smaller spots of bark beetle damage and one large area of budworm damage. This area lies in the northwest corner of the Salmon National Forest north of the Salmon River.

The budworm damage is rather light over 41,000 acres within this area. The center of the infestation appears to be about Bronco Creek. Other concentrations of damage, though of light intensity, are Reynolds Creek, Waugh, and West Horse Mountains.

There were only 20 to 30 trees found attacked by the Douglas-fir bark beetle in this area. These trees were in groups of 3 - 4 trees around Dutchler Mountain, Shoup, within Spring, Swamp, Colson, Cramer, and Bear Basin Creeks, and below West Horse Mountain.

The fir engraver in alpine fir appeared to be of much greater intensity. There were between 800 - 1,000 faded trees spotted within Area A. In this area, the fir engraver has definitely increased in 1956 damage.

Area B.
This area is bounded by the Middle Fork of the Salmon River, the main Salmon River, and the forest boundary, and is located on the extreme west side of the forest.

There are some 37,200 acres of budworm damage within Area B, ranging from light to heavy in intensity. Stoddard Creek Point L. O. appeared to have the heaviest defoliation. This area lies adjacent to the heavy defoliation within the Big Creek area on the Payette National Forest.

There are from 15 to 20 Douglas-fir beetle-attacked trees scattered along the Middle Fork of the Salmon River at Goat Creek.

About 50 to 60 faded alpine fir trees, attacked by the fir engraver, were spotted in this area, but may be considered as normal loss.

Area C.
This area lies between Blackbird, Gant, and Horse Heaven Mountains.

About 75 to 100 Douglas-fir trees attacked by the Douglas-fir bark beetle were spotted over most of the area. These trees appeared in groups of 5 to 10 and were widely scattered.

Practically no alpine fir trees attacked by fir engravers were found in this area.

Area D.
This area is a triangular-shaped tract bounded by the Middle Fork of the Salmon River, Sheep Creek on the south, and the west forest boundary.

No bark beetle damage was spotted in the area. However, about 31,600 acres are infested with spruce budworm. The degree of defoliation varies, with heavy damage in Bernard Creek; medium damage in Soldier Creek; and light damage in Brush Creek. This area also borders the Big Creek area of heavy defoliation on the Payette National Forest.

Area E.

Area E lies between Blackbird Mountain, Swan Peak, Duck Peaks, and Sugar Loaf Mountain.

Scattered groups of bark beetle-damaged trees were found in this area, with the only appreciable loss occurring in Meyer Creek.

Area F.

This area lies between Taylor and Iron Mountains on the south to Lake Mountain on the north.

There were some small spots of very light budworm damage found in Turner Gulch, Perreau Creek, Williams Lake, and North Fork of Iron Creek. These appear to be only spot infestations. The first two creeks mentioned are north of the described area.

Approximately 65 to 90 alpine fir faders were located scattered throughout the area. This may be considered endemic and static in intensity of damage.

Area G.

This is the area in the north part of the forest between Hughes Creek, Sheep Creek, and the forest boundary.

Spots of light budworm damage were noticed at the heads of Twin and Trouble Creeks.

There were about 25 to 30 Douglas-fir fading trees spotted in Area G. These trees were scattered by groups of 3 to 4 trees and represent only an endemic condition.

There were 190 to 200 fading alpine fir trees located in this area. There were scattered throughout the Dahlonega, Trouble, West Fork of the North Fork of the Salmon River, Twin, Veltor and Ransack Drainages. However, due to their widely scattered locations, the fir engraver may be considered, at the most, slightly increasing in 1956. In addition, this area contained a few widely scattered ponderosa pine trees attacked by the western pine beetle.

Area H.

Area H is that portion lying between Stein Mountain and Kirtley Creek.

There was a small spot infestation of budworm in Carmen Creek

Also located in Area H are 150 to 200 Douglas-fir trees attacked by the Douglas-fir bark beetle. The heaviest hit drainages, yet of relatively endemic magnitude, were Carmen, Fourth of July, Wagonhammer, and Mustang Creeks. Smaller groups of fading Douglas-fir trees were spotted in the Little Silver Lead, Bill's, Shoup, and Lick Creeks.

Between 250 and 300 alpine fir trees attacked by the fir engraver were found in this area. The majority of the trees (200) are in the Fourth of July Creek; the remainder are located in the North Fork of Kirtley and Carmen Creeks.

Area I.
This area contains small groups of both Douglas-fir (30-35) and alpine fir (10-15) faders scattered throughout Kenney Creek.

Area J.
Area J is another small area of attacked Douglas-fir trees scattered in Rocky Canyon and Thompson Gulch.

A small infestation of light budworm damage was spotted in Mollie's Gulch.

Area K.
This area contains two localized groups of attacked trees. There were about 30 Douglas-fir trees spotted at the lower end of Haydon Creek and about 200 to 250 alpine fir trees scattered in Zephyr, Swarty, Patterson, Alder, and Mill Creek.

SUMMARY

Three new areas and several spot infestations of spruce budworm have occurred on the Salmon National Forest in 1956. The acreage and intensity of damage is as follows:

Area A	41,000 acres	Light damage
Area B	37,200 acres	Heavy damage
Area D	31,060 acres	Medium damage

The Douglas-fir bark beetle appears to be static or decreasing from the number of 1955-attacked trees spotted.

The fir engraver appears on the increase in some areas on the forest.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

SALMON NATIONAL FOREST

IDAHO

BOISE MERIDIAN

1955*

SCALE

LEGEND

- NATIONAL FOREST BOUNDARY
- ADJACENT NATIONAL FOREST BOUNDARY
- MAIN MOTOR HIGHWAY
- GOOD MOTOR ROAD
- POOR MOTOR ROAD
- TRAIL
- TELEPHONE LINE
- SUPERVISOR'S HEADQUARTERS
- NATIONAL HIGHWAY ROUTE NUMBERS
- STATE HIGHWAY NUMBERS
- DISTRICT RANGER STATION
- GUARD OR RANGER STATION NOT PERMANENTLY OCCUPIED
- PERMANENT LOOKOUT STATION
- TRIANGULATION STATION
- TRIANGULATION STATION AND PERMANENT LOOKOUT STATION
- MUNICIPAL LANDING FIELD
- FOREST SERVICE LANDING FIELD
- FOREST SERVICE RADIO STATION
- HOUSE, CABIN, OR OTHER BUILDING
- NATIONAL FOREST LAND

REPORT ALL FIRES TO FOREST SUPERVISOR, RANGER, SHERIFF, OR ANY TELEPHONE OPERATOR

FOREST SERVICE MAP CLASS E.

COMPILED AT REGIONAL OFFICE, OGDEN, UTAH, FROM DATA OF U.S. FOREST SERVICE AND OTHER AGENCIES. MAP NO. 2 SHOWN.
REVISED 1951 BY C. DAHLIN
REVISED 1954 BY E. BOYER

* REPRINT OF 1949 EDITION

KEY MAP

IDAHO
BOISE
CHALLIS
IDAHO FALLS
POCATELLO

POLYCONIC PROJECTION
NORTH AMERICAN DATUM